



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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July 14, 1992

Mr. Ken A. Kluksdahl
Mine Manager
Tenneco Minerals Company - Utah
P.O. Box 2650
St. George, Utah 84770

Dear Mr. Kluksdahl:

Re: Conditional Notice of Tentative Approval, Tenneco Minerals Company - Utah, Goldstrike Mine, M/053/005, Washington County, Utah

The Division has completed its review of Tenneco Minerals latest permit revision response document, dated May 19, 1992, and has determined the response to be adequate and complete. Tenneco has provided sufficient technical detail to enable this Division to determine the permit revision application conceptually complete. We are now prepared to issue our tentative approval of this proposal. The Division has prepared a public notice which will be forwarded to the appropriate newspaper agencies to initiate a 30-day public comment period. Once the remaining items (as outlined below) have been resolved, and provided no substantive comments are received by the Division during the public comment period, the Division will be prepared to grant its final approval of Tenneco's project revision.

The following items remain to be addressed as points of clarity. We assume they can be resolved prior to the expiration of the 30-public comment period.

R647-4-106.2 Operation Plan. - DWH

The Division has evaluated the proposed design plans for the third "valley fill" leaching facility. We find the plans to be conceptually complete and acceptable. However, we also recognize that ultimate design details and decommissioning standards will need approval of the Bureau of Land Management and the Utah Department of Environmental Quality (DEQ),

Page 2
Mr. Ken A. Kluksdahl
M/053/005
July 14, 1992

Division of Water Quality (DWQ). Therefore, our approval of this facility will be conditioned upon Tenneco's receipt of final DEQ and BLM approval. We request copies of the final approved design plans and decommissioning/effluent standards for the new leaching facility once they have been established by the DEQ (and BLM, as applicable).

R647-4-107. Operation Practices. - HWS/DWH

107.2 and 107.3 - Drainages & Erosion Control

The Division needs further clarification regarding the description of the low-flow crossing construction. Page 62 of the plan describes the construction of the crossings, but fails to answer all our questions. We are particularly interested in the outslope of the riprapped channels. Will they be designed such that they will contain all the runoff from a 100-year 24-hour event storm? What will be their bottom width versus top width? Will the crossings be designed such that all runoff flowing across the road will be contained within the riprapped channel constructed on the outslope of each low-flow crossing?

An inspection was conducted by Division staff on July 2, 1992, of the approved Covington pit road development. It was noted that there has been some change to the proposed road alignment and culvert locations as outlined in the approved amendment plans. Tenneco must provide the Division with updated "as-built" drawings which identify all changes that have been made on the ground as part of the ongoing haul road construction. We also request that Tenneco provide this office with advance notice prior to implementing similar significant design changes that are contrary to the approved plans.

It was also noted that a new culvert (@2 ft. diameter) has been emplaced under the new haul road to bypass drainage from Peg Leg Gulch. It is suggested that a trash rack be installed over the inlet to this culvert to prevent it from plugging with runoff debris. In Tenneco's May 19, 1992 response, a commitment is made to install trashracks on all culverts which are *not* designed to safely pass the runoff from the 100-year, 24-hour precipitation event. We recommend that any culvert which cannot be easily entered to remove entrapped debris (<3 feet diameter?), receive a trash rack.

Page 3
Mr. Ken A. Kluksdahl
M/053/005
July 14, 1992

R647-4-111.2 Reclamation Practices, Natural Stream Channels. - DWH

In Tenneco's May 19, 1992, response (page 71, revised text) to the Division's final approval of the permit amendment, a commitment is made to remove the culverts and road fill from drainages 1T, 2B, 4A, and 5A upon final reclamation. The approximate original stream channel configurations would subsequently be reestablished. The revised text (page 71) also states that where low-flow crossings are constructed, the channels would be re-established across the roads. On page 2 of Tenneco's May 19th cover letter, it is stated that the low-flow crossings will remain in place with little or no modification because they will be designed to pass the 100-yr, 24-hr precipitation event.

These statements are somewhat contradictory. As stated in previous Division review documents, our reclamation cost estimate will reflect a "worst case" scenario of removing the fill associated with all the low-flow crossings and reestablishment of approximate original stream channel configurations. The final decision for allowing any low-flow crossings to remain will be made jointly by the Division, BLM and the county(?) upon mine closure. The decision will be based upon performance and maintenance records obtained over the remaining mine life.

The Division has considered the May 19, 1992 letter from JBR Consultants, regarding Tenneco's request for re-evaluation of the haul road low-flow crossings on drainages 2B and 4A. Arguments are presented regarding the Division's 100 cfs "cut-off" for requiring culverts to be installed in lieu of the proposed low-flow crossing. After evaluating the supplemental information provided, the Division is not convinced or prepared to change its position on this issue. Our original decision stands on culverting those drainages that will have design flow discharge rates in excess of 100 cfs.

R647-4-113.3. Surety. - AAG

An estimate of the volume of fill material to be placed in proposed low-flow crossings (2B & 4A) is needed to adjust the reclamation estimate. The Division has assumed some volumes and has prepared a draft estimate (attached) based upon those assumptions. Please provide further clarification in this regard.

Page 4

Mr. Ken A. Kluksdahl

M/053/005

July 14, 1992


On page 71 of the plan, it states that approximately 6,000 LF of Goldsil haul road will be regraded, but the reclamation treatments maps only show @3,400 LF of regraded road. Please explain this discrepancy.

R647-4-110.2. Reclamation Plan. - AAG

Tenneco's latest response indicates negotiations with the BLM and County are currently underway to leave the haul road for continued post-mine use. What is the current status of these negotiations and who will assume continued long-term maintenance?

As you know, the Board of Oil, Gas and Mining (on March 25, 1992), approved of Tenneco's amount and form of revised reclamation surety (pursuant to the Covington permit amendment). A subsequent board approval may not be required, unless a significant increase to the surety becomes necessary as part of our final approval of this revision. We will try to coordinate our public comment period and issuance of final approval with the Bureau of Land Management to the extent possible. Thank you for your continued cooperation and patience in completing this permitting action.

Sincerely,



Lowell P. Braxton

Associate Director, Mining

jb

cc: Debbie Pietrzak, Dixie RA, BLM
Don Ostler, DWQ
Elliott Lips, JBR
Minerals staff (route)

M053005.1

RECLAMATION ESTIMATE

DRAFT

Tenneco Minerals Company (TMC)

Goldstrike Mine

Washington County

M/053/005

last revision

July 13, 1992

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details

- TMC estimates, DOGM unit costs, Means Site Work & Blue Book used
- Generator for decommission of heap leach (10 months)
- Decommission labor, reagents, supplies, vehicles, etc.(TMC estimate)
- Regrade leach pads, plant, ponds, Padre dump & road, 6000' Goldsil road
- Rip ponds to 24"; all roads, plant, crusher, & contractor sites to 12"
- Remove 4 + 4 culverts; haul, dump, & spread fill (TMC estimate)
- Partial backfilling of Padre & Moosehead pits (to be non-impounding)
- Remove 6 low-flow crossings (re-establish channels)
- Hauling & placing topsoil by scrapers, dozers, & water truck
- Seeding, mulching, crimping, fertilizing or hydroseeding (TMC estimate)
- Miscellaneous: plant & lab demolition, equip. mob/demob, DI pipeline
- Total disturbed area = 382 acres, reclaimed area = 323 acres

Description	Amount	\$/Unit	Cost-\$
Generator (Decommission)	10 mo	750	7,500
Labor (Decommission)	TMC estimate		348,200
Miscellaneous (Decommission)	10 mo	6,000	60,000
Regrading	1,770 hr	185	327,450
Ripping	107 hr	191	20,437
Culvert Removal (Goldstrike= 4)	4	200	800
Culvert Removal (Goldsil= 4)	TMC estimate		71,700
Pit Backfill (Padre & Moosehead)	600,000 ton	0.333	199,800
Removal of low-flow crossings	6 each	6,700	40,200
Topsoiling (TMC estimate)	547 hr	686	375,242
Revegetation	TMC estimate		184,200
Highwall Fence (TMC est)	2,150 ft	3.67	7,891
Miscellaneous	TMC estimate		39,000
Supervision	TMC estimate		44,500
SUBTOTAL			1,726,920
+ 10% CONTINGENCY			172,692
SUBTOTAL			1,899,611
+ 5 yr ESCALATION(1.27%)			123,728
TOTAL			2,023,340
ROUNDED TOTAL IN 1997-\$			\$2,023,000
Average cost per acre =		\$6,263 per acre	